



UNITED STATES PATENT AND TRADEMARK OFFICE

clm
UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/707,914	01/23/2004	William Witherspoon	04W1701	1913
24234	7590	10/16/2007	EXAMINER	
SIMMONS PERRINE PLC			SPINELLA, KEVIN	
THIRD FLOOR TOWER PLACE			ART UNIT	PAPER NUMBER
22 SOUTH LINN STREET			2885	
IOWA CITY, IA 52240				
MAIL DATE		DELIVERY MODE		
10/16/2007		PAPER		

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No.	Applicant(s)	
	10/707,914	WITHERSPOON, WILLIAM	
	Examiner	Art Unit	
	Kevin Spinella	2885	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
 - If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
 - Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) Responsive to communication(s) filed on 7/31/2007.
- 2a) This action is FINAL. 2b) This action is non-final.
- 3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) Claim(s) 1-7,9-13 and 16-24 is/are pending in the application.
- 4a) Of the above claim(s) 1 is/are withdrawn from consideration.
- 5) Claim(s) _____ is/are allowed.
- 6) Claim(s) 2-7,9-13 and 16-24 is/are rejected.
- 7) Claim(s) _____ is/are objected to.
- 8) Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) The specification is objected to by the Examiner.
- 10) The drawing(s) filed on 31 July 2007 is/are: a) accepted or b) objected to by the Examiner.
 Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
 Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) All b) Some * c) None of:
1. Certified copies of the priority documents have been received.
 2. Certified copies of the priority documents have been received in Application No. _____.
 3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) Notice of References Cited (PTO-892)
- 2) Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) Information Disclosure Statement(s) (PTO/SB/08)
 Paper No(s)/Mail Date _____
- 4) Interview Summary (PTO-413)
 Paper No(s)/Mail Date. _____
- 5) Notice of Informal Patent Application
- 6) Other: _____

DETAILED ACTION

Response to Amendment

1. The amendment filed 7/31/2007 has been entered. Currently, Claims 1-7, 9-13, and 16-24 are pending in the application, and Claim 1 is withdrawn from consideration.

Drawings

2. The replacement drawings were received on 7/31/2007. These drawings are acceptable.

Specification

3. The disclosure is objected to because what "the claimant believes" in paragraph 21, lines 19-20 is not sufficient to support selection based on "consideration of a mental characteristic" as stated in Claim 7. Thus, the language of "the claimant believes" should be accordingly removed from the disclosure. Appropriate correction is required.

Claim Objections

4. Claim 7 is objected to because "said translucent panel" in line 1 should read -- said decorative image--.

Claim 13 is objected to because applicant has indicated its status as "currently amended" which should be replaced with --original--.

Appropriate correction is required.

Claim Rejections - 35 USC § 112

5. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.
6. Claims 4, 5, 7, 12, 13, and 20 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

In regard to Claim 4, applicant incorrectly recites the limitation "a magnetic resonance imaging device" as part of the "system for illumination" as recited in Claim 2, when in fact said "magnetic resonance imaging device" is separate from and not any part of said claimed "system for illumination." Thus, Claim 4 is unclear and should be rewritten to enable one of ordinary skill in the art to clearly identify the "magnetic resonance imaging device" as separate from the "system for illumination." Appropriate correction is required.

In regard to Claims 4 and 20, applicant recites the limitations "more shielding structure than said predetermined rectangular ceiling tile and said predetermined rectangular ceiling tile frame" and "structure which provides more shielding than provided by a ceiling structure and said lamp fixture," respectively. It is unclear to one of ordinary skill in the art as to what constitutes "more shielding structure" or "structure which provides more shielding" as such recitations are unclear and could constitute numerous distinct inventions. Also, the claimed term "more" is a relative term, and thus

it is unclear to how much “structure” constitutes “more.” Appropriate correction is required.

In regard to Claims 5 and 13, applicant recites the limitations “insertion, without a need for flexing” as well as “without a need to flex” and “without using a hinging mechanism,” respectively. It is unclear what constitutes a “need for flexing” and similarly it is unclear what constitutes “using a hinging mechanism,” and therefore it is unclear how the aforementioned negative limitations particularly point out and distinctly claim the subject matter which applicant regards as the invention. Also, the claimed term “mechanism” is indefinite as a “mechanism” could describe numerous distinct inventions. Appropriate correction is required.

In regard to Claim 7, applicant recites the limitation “in response to a consideration of a mental characteristic of a patient who is about to be given a magnetic resonance imaging procedure.” It is unclear what constitutes “a consideration” and “a mental characteristic” as such are open-ended limitations, and both “a consideration” and “a mental characteristic” do not distinctly define any particular subject matter which applicant regards as the invention. For example, a “consideration” could encompass an active diagnosis of a patient or a discussion with fellow doctors, and similarly a “mental characteristic” could encompass a mood or a chronic condition. Thus, the recitation is clearly indefinite. Appropriate correction is required.

In regard to Claim 12, applicant recites the limitation a “predetermined rectangular ceiling tile is a component of a fixture disposed below a non-hung grid ceiling.” It is unclear to one of ordinary skill in the art to what is meant by both “a component of a fixture” and “a fixture,” and thus the aforementioned recitation is clearly indefinite to one of ordinary skill in the art. Appropriate correction is required.

Claim Rejections - 35 USC § 102

7. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

8. Claims 2 and 21 are rejected under 35 U.S.C. 102(e) as being anticipated by Nolan et al. (US Publication 2003/00721145 A1, hereafter Nolan).

Nolan teaches a system for illumination (Title, Figure 1) comprising: an array of light emitting diodes (LEDs) 40 (Figures 3-4; paragraph 32, line 5: “LED lamps 68 in a parallel array”); a direct current power source 30 (Figure 1, paragraph 30, lines 1-3: “low voltage power supply 30 further includes transformer 32 converting 110 and 220 AC current to low voltage DC current”) coupled to (paragraph 32, line 3: “DC contact points 64”) to said array 40 (Figure 4); a predetermined rectangular (Figure 1) ceiling tile frame

100 (Figure 1, paragraph 29, line 6: "ceiling 100") comprising a plurality of rectangular (Figure 1) openings (Figure 1, openings constitute the spaces filled by the flush mounted ceiling housings 22, see also Figure 6); a translucent panel 70 (Figure 3, Figure 6; paragraph 34, lines 1-2: "colorized diffusion panel 70 disperses the light and spreads it about the illuminated area"), having a front side (Figure 6) and a back side (Figure 6), said panel 70 (Figure 3, Figure 6) disposed in (Figure 6, disposed in flush mounted ceiling housing 22 which is disposed in) one of said plurality of rectangular openings (Figure 1) and positioned (Figure 3, Figure 6) so as to be uniformly lighted from said back side (Figure 3, Figure 6) by said array 40 (Figure 4, Figure 6), and wherein the array of LEDs 40 (Figures 3-4) is disposed above one (Figure 6) of said plurality of rectangular openings (Figure 1) and positioned (Figure 6) so as to uniformly light (Figure 6) the space in the opening (Figure 1).

Regarding the Claim 2 and 21 recitation that the plurality of rectangular openings are "configured to receive and retain therein a predetermined rectangular ceiling tile," the applicant is advised that, while the features of an apparatus may be recited either structurally or functionally, claims directed to an apparatus must be distinguished from the prior art in terms of structure rather than function. *In re Schreiber*, 44 USPQ2d 1429. In addition, it has been held by the courts that apparatus claims cover what a device is, not what a device does. *Hewlett-Packard Co. v. Bausch & Lomb Inc.*, 15 USPQ2d 1525 (Fed. Cir. 1990). In this case, the published apparatus of Nolan discloses (as detailed above) all the structural limitations required to perform the recited

functional language, and therefore is considered to anticipate the claimed system for illumination.

Claim Rejections - 35 USC § 103

9. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

10. Claims 3, 5-7, 9, 10, 13, and 16 are rejected under 35 U.S.C. 103(a) as being unpatentable over Nolan in view of McManigal (US Patent No.: 5,251,392, hereafter McManigal).

In regard to Claim 3, Nolan teaches said array 40 (Figures 3-4) is disposed above (Figure 6) said predetermined rectangular (Figure 1) ceiling tile frame 100 (Figure 1). Nolan lacks said translucent panel having a decorative static image disposed thereon so as to be visible from said front side.

McManigal teaches a translucent panel 24 (Figure 3; Col. 3, line 1: "sheet 24 is translucent") having a decorative static image 25 (Figure 3; Col. 3, lines 4-9, Col. 7, lines 11-20) disposed thereon (Figure 3) so as to be visible from said front side (Figure 3, see also decorative static image 20 in Figures 1 and 2; Col. 2, lines 47-50, Col. 2, lines 64-67). McManigal teaches a scene or picture is produced on a film or

transparency, and a "window" effect is created (Figure 1, Col. 1, lines 9-14). Such implementation also enhances the aesthetics of the lighting device.

Therefore it would have been obvious to one of ordinary skill in the art at the time the invention was made to incorporate the decorative static image of the artificial window lighting device of McManigal in combination with the translucent panel of the LED ceiling light fixture of Nolan in order to allow for creation of a "window" effect for the viewer as well as to further enhance aesthetics.

In regard to Claim 5, Nolan teaches said array 40 of LEDs 68 (Figure 4) is disposed (Figure 6) in an LED lamp assembly (Figure 6) comprising a hood with opposing end risers (paragraph 35, line 4: "ceiling housing 22" constitutes both a hood and opposing end risers as shown in Figure 6, opposing end risers are opposing sidewalls of hood housing 22), said translucent panel 70 (Figure 3, Figure 6) is in said predetermined rectangular (Figure 1) ceiling tile frame 100 (Figure 1) at a location below (Figure 6) said array 40; and uniform dispersion of light (Figure 6) is onto said translucent panel 70 (Figure 3, Figure 6).

Regarding the Claim 5 recitation that the opposing end risers are "configured to facilitate insertion, without the need for flexing, of said translucent panel into said predetermined rectangular ceiling tile frame" the applicant is advised that, while the features of an apparatus may be recited either structurally or functionally, claims directed to an apparatus must be distinguished from the prior art in terms of structure

rather than function. *In re Schreiber*, 44 USPQ2d 1429. In addition, it has been held by the courts that apparatus claims cover what a device is, not what a device does.

Hewlett-Packard Co. v. Bausch & Lomb Inc., 15 USPQ2d 1525 (Fed. Cir. 1990). In this case, the published apparatus of Nolan discloses (as detailed above) all the structural limitations required to perform the recited functional language, and therefore is considered to teach the claimed system for illumination.

In regard to Claim 6, Nolan teaches said array 40 of LEDs 68 (Figure 4) emits light at an angle of at least 50 degrees (Figure 3, Figure 6). As shown in Figures 3 and 6, the array 40 of LEDs 68 are unhindered by any surrounding structure and thus will emit light in numerous directions over a wide angular range. "In considering the disclosure of a reference, it is proper to take into account not only specific teachings of the reference but also the inferences which one skilled in the art would reasonably be expected to draw therefrom." *In re Preda*, 401 F.2d 825, 826, 159 USPQ 342, 344 (CCPA 1968).

In regard to Claim 7, McManigal teaches said decorative image 25 on (Figure 3) said translucent panel 24 is chosen as desired (Col. 7, lines 11-20).

Although Nolan and McManigal lack said decorative image and said translucent panel is chosen in response to a consideration of a mental characteristic of a patient who is about to be given a magnetic resonance imaging procedure, it would have been obvious to one of ordinary skill in the art at the time the invention was made to choose

said translucent panel and said decorative image in response to a consideration of a mental characteristic of a patient who is about to be given a magnetic resonance imaging procedure, since the selection of such is an aesthetic choice that is always made with respect to an intended viewer to create a more visually pleasing environment, and since the courts have stated that matters relating to ornamentation only which have no mechanical function cannot be relied upon to patentably distinguish the claimed invention from the prior art. *In re Seid*, 161 F.2d 229, 73 USPQ 431 (CCPA 1947).

In regard to Claim 9, Nolan teaches a hood and support structure (Figure 1, paragraph 35, line 4: "ceiling housing 22" constitutes both a hood and opposing end risers as shown in Figure 6, opposing end risers are opposing sidewalls of hood housing 22) of said array 40 (Figure 4, Figure 6). McManigal teaches predetermined patterns 20 (Figure 1) comprising images of a sky with a foreground being clouds (Figure 1, Col. 2, lines 47-50: "scene appears at 20 in the artificial window 15" and "note for example the depicted road, trees, sky, and clouds.") See motivation as previously discussed to combine references.

Although Nolan and McManigal lack said hood and support structure are comprised of aluminum, it would have been obvious to one of ordinary skill in the art at the time the invention was made to incorporate said hood and support structure to be comprised of the notoriously well known metal aluminum in order to allow for simultaneous strong support of the attached LED array and for high reflectivity, and

Art Unit: 2885

since it has been held by the courts that selection of a prior art material on the basis of its suitability for its intended purpose is within the level of ordinary skill. *In re Leshing*, 125 USPQ 416 (CCPA 1960) and *Sinclair & Carroll Co. v. Interchemical Corp.*, 65 USPQ 297 (1945).

In regard to Claim 10, although Nolan and McManigal lack said predetermined rectangular ceiling tile frame is non-ferrous, it would have been obvious to one of ordinary skill in the art at the time the invention was made to incorporate said predetermined rectangular ceiling tile frame to be made of a non-ferrous material in order to allow for a ceiling tile frame not easily prone to rust as a result of any proximate moisture and also capable of use in areas consisting of high magnetic fields, and since it has been held by the courts that selection of a prior art material on the basis of its suitability for its intended purpose is within the level of ordinary skill. *In re Leshing*, 125 USPQ 416 (CCPA 1960) and *Sinclair & Carroll Co. v. Interchemical Corp.*, 65 USPQ 297 (1945).

In regard to Claim 13, Nolan teaches a source of light 40 (Figures 3-4; paragraph 32, line 5: "LED lamps 68 in a parallel array") in a lamp fixture (Figure 1, Figure 6); a power source 30 (Figure 1, paragraph 30, lines 1-3: "low voltage power supply 30 further includes transformer 32 converting 110 and 220 AC current to low voltage DC current") coupled to (paragraph 32, line 3: "DC contact points 64") said source of light 40 (Figure 4); a predetermined rectangular (Figure 1) ceiling tile frame 100 (Figure 1,

paragraph 29, line 6: "ceiling 100") comprising a plurality of rectangular (Figure 1) openings (Figure 1, openings constitute the spaces filled by the flush mounted ceiling housings 22, see also Figure 6); a translucent panel 70 (Figure 3, Figure 6; paragraph 34, lines 1-2: "colorized diffusion panel 70 disperses the light and spreads it about the illuminated area"), having a front side (Figure 6) and a back side (Figure 6), said panel 70 (Figure 3, Figure 6) disposed in (Figure 6, disposed in flush mounted ceiling housing 22 which is disposed in) one of said plurality of rectangular openings (Figure 1) and positioned (Figure 3, Figure 6) so as to be uniformly lighted from said back side (Figure 3, Figure 6) by said array 40 (Figure 4, Figure 6), said lamp fixture (Figure 1, Figure 6) and said predetermined rectangular (Figure 1) ceiling tile frame 100 (Figure 1) having risers (paragraph 35, line 4: "ceiling housing 22" constitutes both a hood and opposing end risers as shown in Figure 6, opposing end risers are opposing sidewalls of hood housing 22), said translucent panel 70 (Figure 3, Figure 6) is in said predetermined rectangular (Figure 1) ceiling tile frame 100 (Figure 1) at a location below (Figure 6) said lamp fixture (Figure 1, Figure 6).

Nolan lacks said translucent panel comprising a decorative static image thereon of a scene of a sky with a foreground.

McManigal teaches a translucent panel 24 (Figure 3; Col. 3, line 1: "sheet 24 is translucent") having a decorative static image 25 (Figure 3; Col. 3, lines 4-9, Col. 7, lines 11-20) disposed thereon (Figure 3, see also decorative static image 20 in Figures 1 and 2; Col. 2, lines 47-50: "scene appears at 20 in the artificial window 15" and "note for example the depicted road, trees, sky, and clouds", Col. 2, lines 64-67). McManigal

teaches a scene or picture is produced on a film or transparency, and a “window” effect is created (Figure 1, Col. 1, lines 9-14). Such implementation also enhances the aesthetics of the lighting device.

Therefore it would have been obvious to one of ordinary skill in the art at the time the invention was made to incorporate the decorative static image of the artificial window lighting device of McManigal in combination with the translucent panel of the LED ceiling light fixture of Nolan in order to allow for creation of a “window” effect for the viewer as well as to further enhance aesthetics.

Regarding the Claim 13 recitation that the plurality of rectangular openings are “configured to receive and retain therein a predetermined rectangular ceiling tile” and the recitation “configured with risers such that said translucent panel is insertable in said predetermined rectangular ceiling frame ... without a need to flex said translucent panel and without using a hinging mechanism;” the applicant is advised that, while the features of an apparatus may be recited either structurally or functionally, claims directed to an apparatus must be distinguished from the prior art in terms of structure rather than function. *In re Schreiber*, 44 USPQ2d 1429. In addition, it has been held by the courts that apparatus claims cover what a device is, not what a device does.

Hewlett-Packard Co. v. Bausch & Lomb Inc., 15 USPQ2d 1525 (Fed. Cir. 1990). In this case, the published apparatus of Nolan discloses (as detailed above) all the structural limitations required to perform the recited functional language, and therefore is considered to teach the claimed system for illumination.

In regard to Claim 16, Nolan teaches said source of light 40 is an array of light emitting diodes 40 (Figures 3-4; paragraph 32, line 5: "LED lamps 68 in a parallel array") and said power source 30 is a direct current power source 30 (Figure 1, paragraph 30, lines 1-3: "low voltage power supply 30 further includes transformer 32 converting 110 and 220 AC current to low voltage DC current").

11. Claims 4 and 17-20 are rejected under 35 U.S.C. 103(a) as being unpatentable over Damadian et al. (US Patent No.: 6,922,055 B1, hereafter Damadian) as modified by Nolan, and further in view of McManigal.

In regard to Claim 4, Damadian teaches a magnetic resonance imaging device (Title, Figures 1-2) and shielding structure (Figure 1, Col. 8, lines 36-41: "the room 10 also, preferably, is surrounded with a continuous or substantially continuous electrically conductive shield, commonly referred to as a Faraday shield, which shields the working space and the gap region 42 from radio frequency interference with the magnet resonance imaging procedure;" Col. 8, lines 44-46: "the floor 66, the walls 76 and the ceiling 70 of the room 10 are provided with conductive elements such as conductive mesh 80;" Col. 8, lines 53-54: "mesh in the door 82 and a conductive film on the window 84"). Damadian also teaches fixtures such as overhead lights (not shown) that are secured to the ceiling 70 may be provided with similar shielding (Col. 8, lines 62-63).

Damadian lacks the limitations of Claim 2 and 3 as previously discussed in the rejections of Claim 2 and 3 in paragraphs 8 and 10 above. Damadian also lacks the

Claim 4 limitation of a direct current power source is an alternating current to direct current power adapter which is separated from a magnetic resonance imaging device by more shielding structure than said predetermined rectangular ceiling tile and said predetermined rectangular ceiling tile frame.

Nolan teaches the limitations as previously discussed in paragraphs 8 and 10 above. Nolan also teaches a direct current power source 30 (Figure 1) is an alternating current to direct current power adapter (Figure 1, paragraph 30, lines 1-3: "low voltage power supply 30 further includes transformer 32 converting 110 and 220 AC current to low voltage DC current"), which is separated from a room (Figure 1) by ceiling 100 (Figure 1). Nolan teaches a lighting fixture utilizing a plurality of bright white LEDs to produce a high lumen output ceiling light fixture, which does not require replacement of any bulbs or lighting tubes during the reasonable life of the fixture (paragraph 15).

Therefore it would have been obvious to one of ordinary skill in the art at the time the invention was made to incorporate the LED ceiling light fixture and configuration of Nolan in combination with the ceiling overhead lights of the magnetic resonance imaging room of Damadian in order to allow for a high lumen output ceiling light fixture, which does not require replacement of any bulbs or lighting tubes during the reasonable life of the fixture.

Damadian and Nolan lack said translucent panel having a decorative static image disposed thereon so as to be visible from said front side.

McManigal teaches a translucent panel 24 (Figure 3; Col. 3, line 1: "sheet 24 is translucent") having a decorative static image 25 (Figure 3; Col. 3, lines 4-9, Col. 7,

lines 11-20) disposed thereon (Figure 3) so as to be visible from said front side (Figure 3, see also decorative static image 20 in Figures 1 and 2; Col. 2, lines 47-50, Col. 2, lines 64-67). McManigal teaches a scene or picture is produced on a film or transparency, and a “window” effect is created (Figure 1, Col. 1, lines 9-14). Such implementation also enhances the aesthetics of the lighting device.

Therefore it would have been obvious to one of ordinary skill in the art at the time the invention was made to further modify the ceiling overhead lights of the magnetic resonance imaging room of Damadian in combination with the LED ceiling light fixture and configuration of Nolan by incorporating the decorative static image of the artificial window lighting device of McManigal in order to allow for creation of a “window” effect for the viewer as well as to further enhance aesthetics.

Although Damadian, Nolan, and McManigal lack said direct current power source separated and shielded from a magnetic resonance imaging device by more shielding structure than said predetermined ceiling tile, said predetermined rectangular ceiling tile frame, and said lamp fixture, it would have been obvious to one of ordinary skill in the art at the time the invention was made to arrange the direct current power source to be separated and shielded from a magnetic resonance imaging device by shielding structure in order to allow for protection of said direct current power source from high magnetic fields, and since it has been held that rearranging parts of a prior art structure involves only routine skill in the art. *In re Japikse*, 181 F.2d 1019, 86 USPQ 70 (CCPA 1950).

In regard to Claim 17, Damadian teaches a magnetic resonance imaging device (Title, Figures 1-2) and room 10 (Figures 1-2). Damadian also teaches fixtures such as overhead lights (not shown) that are secured to the ceiling 70 (Col. 8, lines 62-63).

Damadian lacks the limitations of Claim 13 and 16 as previously discussed in the rejections of Claim 13 and 16 in paragraph 10 above. Damadian also lacks said array is disposed above a ceiling of a room containing a magnetic resonance imaging system and wherein said array is shrouded by an aluminum hood disposed so as to reflect light downward through the panel.

Nolan teaches the limitations as previously discussed in paragraph 10 above. Nolan also teaches an array 40 (Figure 4, Figure 6) disposed above (Figure 1) a ceiling 100 of a room (Figure 1) and said array 40 shrouded by a hood (paragraph 35, line 4: "ceiling housing 22" constitutes both a hood and opposing end risers as shown in Figure 6, opposing end risers are opposing sidewalls of hood housing 22) disposed so as to reflect light downward (Figure 6) through the panel 70 (Figure 3, Figure 6). Nolan teaches a lighting fixture utilizing a plurality of bright white LEDs to produce a high lumen output ceiling light fixture, which does not require replacement of any bulbs or lighting tubes during the reasonable life of the fixture (paragraph 15).

Therefore it would have been obvious to one of ordinary skill in the art at the time the invention was made to incorporate the LED ceiling light fixture and configuration of Nolan in combination with the ceiling overhead lights of the magnetic resonance imaging room of Damadian in order to allow for a high lumen output ceiling light fixture,

which does not require replacement of any bulbs or lighting tubes during the reasonable life of the fixture.

Damadian and Nolan lack said translucent panel having a decorative static image thereon of a scene of a sky with a foreground.

McManigal teaches a translucent panel 24 (Figure 3; Col. 3, line 1: "sheet 24 is translucent") having a decorative static image 25 (Figure 3; Col. 3, lines 4-9, Col. 7, lines 11-20) disposed thereon (Figure 3, see also decorative static image 20 in Figures 1 and 2; Col. 2, lines 47-50: "scene appears at 20 in the artificial window 15" and "note for example the depicted road, trees, sky, and clouds", Col. 2, lines 64-67). McManigal teaches a scene or picture is produced on a film or transparency, and a "window" effect is created (Figure 1, Col. 1, lines 9-14). Such implementation also enhances the aesthetics of the lighting device.

Therefore it would have been obvious to one of ordinary skill in the art at the time the invention was made to further modify the ceiling overhead lights of the magnetic resonance imaging room of Damadian in combination with the LED ceiling light fixture and configuration of Nolan by incorporating the decorative static image of the artificial window lighting device of McManigal in order to allow for creation of a "window" effect for the viewer as well as to further enhance aesthetics.

Although Damadian, Nolan, and McManigal lack an aluminum hood, it would have been obvious to one of ordinary skill in the art at the time the invention was made to incorporate said hood to be comprised of the notoriously well known metal aluminum in order to allow for simultaneous strong support of the attached LED array and for high

Art Unit: 2885

reflectivity, and since it has been held by the courts that selection of a prior art material on the basis of its suitability for its intended purpose is within the level of ordinary skill.

In re Leshing, 125 USPQ 416 (CCPA 1960) and *Sinclair & Carroll Co. v. Interchemical Corp.*, 65 USPQ 297 (1945).

In regard to Claim 18, Damadian teaches a horizontal resting platform 54 (Figure 1) for a patient 56 (Figure 1) lying horizontally (Figure 1) on said horizontal platform 54 (Figure 1) waiting to undergo a procedure (Figure 1) with said magnetic resonance imaging system (Title).

Although Damadian, Nolan, and McManigal lack said scene of a sky with a foreground having a predetermined orientation with respect to a zenith for a patient, it would have been obvious to one of ordinary skill in the art at the time the invention was made to incorporate said scene of a sky with a foreground having a predetermined orientation with respect to a zenith for a patient, since the selection of such is an aesthetic choice that is always made with respect to an intended viewer to create a more visually pleasing environment and, since the courts have stated that matters relating to ornamentation only which have no mechanical function cannot be relied upon to patentably distinguish the claimed invention from the prior art. *In re Seid*, 161 F.2d 229, 73 USPQ 431 (CCPA 1947).

In regard to Claim 19, although Damadian, Nolan, and McManigal lack said risers made of aluminum, it would have been obvious to one of ordinary skill in the art at the

time the invention was made to incorporate said risers to be comprised of the notoriously well known metal aluminum in order to allow for simultaneous strong support of the attached LED array and for high reflectivity, and since it has been held by the courts that selection of a prior art material on the basis of its suitability for its intended purpose is within the level of ordinary skill. *In re Leshing*, 125 USPQ 416 (CCPA 1960) and *Sinclair & Carroll Co. v. Interchemical Corp.*, 65 USPQ 297 (1945).

In regard to Claim 20, Damadian teaches shielding structure (Figure 1, Col. 8, lines 36-41: "the room 10 also, preferably, is surrounded with a continuous or substantially continuous electrically conductive shield, commonly referred to as a Faraday shield, which shields the working space and the gap region 42 from radio frequency interference with the magnet resonance imaging procedure;" Col. 8, lines 44-46: "the floor 66, the walls 76 and the ceiling 70 of the room 10 are provided with conductive elements such as conductive mesh 80;" Col. 8, lines 53-54: "mesh in the door 82 and a conductive film on the window 84"). Nolan teaches said direct current power source 30 (Figure 1, paragraph 30, lines 1-3: "low voltage power supply 30 further includes transformer 32 converting 110 and 220 AC current to low voltage DC current") is located outside said room (Figure 1, located above ceiling, and thus outside room below). See motivation to combine references as previously described above.

Although Damadian, Nolan, and McManigal lack said direct current power source separated and shielded from a magnetic resonance imaging device by more shielding structure than said predetermined ceiling tile, said predetermined rectangular ceiling tile

frame, and said lamp fixture, it would have been obvious to one of ordinary skill in the art at the time the invention was made to arrange the direct current power source to be separated and shielded from a magnetic resonance imaging device by shielding structure in order to allow for protection of said direct current power source from high magnetic fields, and since it has been held that rearranging parts of a prior art structure involves only routine skill in the art. *In re Japikse*, 181 F.2d 1019, 86 USPQ 70 (CCPA 1950).

12. Claims 11, 12, and 22-24 are rejected under 35 U.S.C. 103(a) as being unpatentable over Damadian as modified by Nolan.

In regard to Claims 11 and 22, Damadian teaches a magnetic resonance imaging device (Title, Figures 1-2) and room 10 (Figures 1-2). Damadian also teaches fixtures such as overhead lights (not shown) that are secured to the ceiling 70 (Col. 8, lines 62-63).

Damadian lacks said array is disposed in an overhead position in a room containing a magnetic resonance imaging system.

Nolan teaches the limitations as previously discussed in paragraph 8 above. Nolan teaches a lighting fixture utilizing a plurality of bright white LEDs to produce a high lumen output ceiling light fixture, which does not require replacement of any bulbs or lighting tubes during the reasonable life of the fixture (paragraph 15).

Therefore it would have been obvious to one of ordinary skill in the art at the time the invention was made to incorporate the LED ceiling light fixture and configuration of Nolan in combination with the ceiling overhead lights of the magnetic resonance imaging room of Damadian in order to allow for a high lumen output ceiling light fixture, which does not require replacement of any bulbs or lighting tubes during the reasonable life of the fixture.

In regard to Claims 12 and 23, Damadian teaches said predetermined rectangular (Figure 1) ceiling tile frame 70 (Figure 1) is a component (Figure 1) of a fixture (Col. 8, lines 62-63) disposed on (Figure 1) a non-hung grid ceiling (Figure 1) of said room 10 (Figure 1). Nolan teaches a fixture 20 (paragraph 29, line 9) disposed below (Figure 1) a non-hung ceiling (Figure 1, top ceiling portion 100). See motivation above in rejection of Claim 11 to combine references.

In regard to Claim 24, Nolan teaches a translucent panel 70 (Figure 3, Figure 6; paragraph 34, lines 1-2: "colorized diffusion panel 70 disperses the light and spreads it about the illuminated area"), having a front side (Figure 6) and a back side (Figure 6), said panel 70 (Figure 3, Figure 6) disposed in (Figure 6, disposed in flush mounted ceiling housing 22 which is disposed in) one of said plurality of rectangular openings (Figure 1) and positioned (Figure 3, Figure 6) so as to be uniformly lighted from said back side (Figure 3, Figure 6) by said array 40 (Figure 4, Figure 6). See motivation to combine references as previously discussed above.

Response to Arguments

13. Applicant's arguments with respect to Claims 2-7, 9-13, and 16-24 have been considered but are moot in view of the new ground(s) of rejection.

Conclusion

14. The references made of record and not relied upon is considered pertinent to applicant's disclosure: Mondloch et al. (US Publication No.: 2007/0121328 A1) discloses a LED lighting system for use in environments with high magnetic fields; Witherspoon (US D484,619 S) discloses a sky and clouds face of a ceiling tile arrangement; and Hoshino (English Abstract of Japanese Publication JP 2004253302 A) discloses an illumination apparatus for use in an MRI room.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Kevin Spinella whose telephone number is 571-270-1284. The examiner can normally be reached on Monday - Friday, from 7:30 a.m. to 5:00 p.m. EST.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Jong-Suk (James) Lee can be reached on (571) 272-7044. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Kern Spinella

KJS



JONG-SUK (JAMES) LEE
SUPERVISORY PATENT EXAMINER